

REMARKS

Claims 16 to 30 are pending in the present application.

In view of the following, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

With respect to paragraph two (2) of the Office Action, claims 16 to 24 and 26 to 29 were rejected under 35 U.S.C § 112, second paragraph, as indefinite.

While the rejections may not be agreed with, to facilitate matters, claim 16 has been rewritten to better clarify the claimed subject matter. As to claim 16, as presented, the present application specifically discloses that:

The generator control may be divided into three areas of control, in this context. The first area of control relates to a voltage control in the immediate surround field of the setpoint voltage, and in response to changes in the braking torque, only up to the set excess torque. The second area of control relates to the situation in which the generator cannot adjust the load change and the voltage change using the available excess torque, but the voltage deviation is still just within the admissible boundaries. In this context, the boundary value (excess torque) is able to be changed within the possibilities of the torque buildup in any time-dependent manner.

(Substitute Specification, page 3, lines 6 to 20).

This portion of the specification describes the actual operation of the controller in response to changes in generator voltage. Additionally, the term “operating characteristics” has been replaced with the term “operation.” Accordingly, it is believed and respectfully submitted that claim 16 is definite in view of the specification, and since it would be understood by a person having ordinary skill in the art -- especially in view of the specification.

With respect to paragraph three (3) of the Office Action, claims 17, 19, 23 and 27 were rejected under 35 U.S.C § 112, second paragraph, as indefinite.

As to claim 17, the term “as a function of” has been rewritten to clarify the subject matter of claim 17. Further, the present application specifically discloses that:

[T]he boundaries (see illustration in Figure 3), at which switchover takes place between voltage control and torque control, may be designed as a function of operating characteristics variables of the device or of the vehicle. Such a dependence is able to be expediently implemented by appropriate characteristics maps. In a corresponding manner, the widths of the areas, in which a voltage

control or a torque control is to take place, or the transition locations between these two areas, may be designed variably.

(Substitute Specification, page 10, lines 2 to 12).

As to claim 19, the present application states that: “*n a first area 30, which lies in the immediate surround field of setpoint voltage U_{Soll} , a voltage control is provided. In this context, if changes in torque M occur, these are permitted up to a specifiable boundary value.*” (Substitute Specification, page 6, lines 9 to 12).

As to claims 23 and 27, the present application states that “*torque M may be changed according to a function $F=F(T, P)$, where T is the time and P is an operating parameter of the device.*” (Substitute Specification, page 8, lines 22 to 25).

Accordingly, it is believed and respectfully submitted that claims 17, 19, 23 and 27 are definite in view of the specification, especially since it would be understood by a person having ordinary skill in the art in view of the specification.

With respect to paragraph four (4) of the Office Action, claims 22 and 26 were rejected under 35 U.S.C § 112, second paragraph, as indefinite.

While the rejections may not be agreed with, to facilitate matters, claims 22 and 26 have been rewritten to better clarify the claimed subject matter. Further, as to claims 22 and 26, the present application specifically discloses that: “*According to different example embodiments of the present invention, different strategies may be employed for the control of the torque in the area of torque control*”, and that, for example, in an example embodiment *torque M may rise linearly, the increase being implementable using different slopes*” (Substitute Specification, page 8, lines 14 to 18).

Accordingly, it is believed and respectfully submitted that claims 22 and 26 are definite in view of the specification, especially since it would be understood by a person having ordinary skill in the art in view of the specification.

With respect to paragraph five (5) of the Office Action, claims 24 and 28 were rejected under 35 U.S.C § 112, second paragraph, as indefinite.

As to claims 24 and 28, the present application specifically discloses that in a further example embodiment, a “*functional dependence of the torque on influencing variables may be implemented also by a corresponding characteristics map K , in which a certain value of*

torque M is assigned to corresponding values of one or more influencing variables.”
(Substitute Specification, page 8, lines 25 to 29).

Accordingly, it is believed and respectfully submitted that claims 24 and 28 are definite in view of the specification, especially since it would be understood by a person having ordinary skill in the art in view of the specification.

With respect to paragraph six (6) of the Office Action, claims 17, 19, 22 to 24 and 29 were rejected as allegedly relating to acts that do not manipulate appropriate subject matter.

It is understood that the Office Action apparently may have intended this rejection to relate to 35 U.S.C. § 101. It is respectfully submitted that claims 17, 19, 22 to 24 and 29 encompass patent-eligible subject matter, as do their respective dependent claims (see MPEP § 2107.02). For example, each of these claims is directed to the manner in which the controller is operated to regulate generator voltage or braking torque., and therefore manipulates an article -- as provided for by the Federal Circuit.

With respect to paragraph seven (7) of the Office Action, claims 16 to 24 were rejected under 35 U.S.C § 112, second paragraph, as indefinite.

The Office Action asserts that a “means for obtaining the operating characteristics of the system” and a “means for generating the area(s) of operating characteristics” are missing. The assertedly missing structural elements do not directly relate to the cooperative relationship between the generator and the controller as provided for in the context of claims 16 to 24. Instead, they apparently relate to additional subject matter which would be the proper subject of additional dependent claims. Accordingly, the indefiniteness rejections of claims 16 to 24 should be withdrawn.

With respect to paragraph eight (8) of the Office Action, claims 16 to 24 were rejected under 35 U.S.C § 112, second paragraph, as indefinite.

While the rejections may not be agreed with, to facilitate matters, claims 16 and 17 have been rewritten to better clarify the subject matter, so that these claims are allowable, as are their respective dependent claims.

With respect to paragraph twelve (12) of the Office Action, claims 16, 18, 20, 21, 25, 29 and 30 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent App. Pub. No. 2003/0107351 (“Taniguchi”) in view of U.S. Patent No. 5,095,703 (“Okimoto”).

To reject a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Also, as clearly indicated by the Supreme Court in *KSR*, it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *See KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007). In this regard, the Supreme Court further noted that “rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, at 1396. Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Claim 16, as presented, is to *a controller configured to control a voltage of the generator by outputting a control signal to the generator in response to changes in the generator voltage, wherein the controller provides a first area of operation in which a voltage control is performed to regulate the generator voltage, and at least one second area of operation in which a torque control is performed to regulate a braking torque exerted by the generator.*

In contrast, Taniguchi does not describe the feature of controlling of a generator in response to changes in generator voltage, nor does Taniguchi describe first and second areas of operation, one of which is associated with voltage control, and the other associated with torque control. Instead, Taniguchi is directed towards management of belt tension between an engine and an alternator when there is a change in engine speed. The alternator is, according to Taniguchi, controlled in response to engine speed so as to minimize inertial

torque that would result in undesirable changes in the belt tension. Accordingly, Taniguchi does not disclose or suggest both the features of voltage control and torque control, as provided for in the context of claim 16, as presented.

The Okimoto reference concerns an air and fuel supply control system for an internal combustion engine and is therefore entirely unrelated to the fields of either the present invention or Taniguchi. The portions of Okimoto cited by the Office Action relate to controlling a degree of intake airflow. It is therefore respectfully submitted that one skilled in the art would have no reason to combine Okimoto with Taniguchi. Moreover, Okimoto does not cure -- nor is Okimoto purported to cure -- the critical deficiencies of Taniguchi as explained above.

Accordingly, claim 16, as presented, is allowable, as are its dependent claims 18, 20 and 21.

Claim 25, as presented, is to *performing a voltage control in which the generator voltage is regulated with reference to the setpoint voltage, if the recorded voltage lies in the specified range from the setpoint voltage; performing a torque control in which a braking torque exerted by the generator is regulated, if the recorded voltage: a) lies outside the specified range from the setpoint voltage; and b) lies within a predetermined range defined by voltage boundary values; and specifying a highest priority for the voltage control, if the recorded voltage lies outside the predetermined range defined by the voltage boundary values.*

As explained above, neither Taniguchi nor Okimoto disclose or suggest the feature of *a controller configured to control a voltage of the generator by outputting a control signal to the generator in response to changes in the generator voltage, wherein the controller provides a first area of operation in which a voltage control is performed to regulate the generator voltage, and at least one second area of operation in which a torque control is performed to regulate a braking torque exerted by the generator, as provided for in the context of the claimed subject matter.*

Accordingly, claim 25, as presented, is allowable for at least the same reasons as claim 16, as are its dependent claims 29 and 30.

Withdrawal of the rejections is therefore respectfully requested.

In sum, claims 16 to 30 are allowable.

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CONCLUSION

In view of the foregoing, it is respectfully submitted that all of presently pending claims 16 to 30 are allowable. It is therefore respectfully requested that the objections and rejections be withdrawn. Since all issues raised by the Examiner have been addressed, an early and favorable action on the merits is respectfully requested.

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